

# Fact Sheet



Kelly Air Force Base Conversion Agency

July 2002

## Zone 4 Cleanup Plan Proposed

Modeling shows that an Air Force plan for cleaning up shallow groundwater contamination east of the former Kelly Air Force Base will reduce the off-base plume by 70% in five years and 99% in ten years.

The Air Force proposes the installation of two permeable reactive barriers to the east of Zone 4, or East Kelly, and vertical groundwater extraction wells south of East Kelly.

The permeable reactive barriers are underground trenches filled with iron filings placed to intercept the groundwater flows. As water passes through the trenches, the iron filings convert the contaminants to carbon dioxide, water and the mineral, chloride. This process takes advantage of the natural flow of the groundwater and treats it completely underground.

The vertical extraction wells to be installed south of East Kelly will capture and pump groundwater to the East Kelly water treatment plant. Because of the slower movement of groundwater in this area, these wells may treat groundwater faster than a permeable reactive barrier could.

These proposed systems will work together with two existing cleanup systems installed on the former base. Both existing systems keep contaminated groundwater from moving off-base by capturing and pumping it to the two water treatment plants on Kelly. Among other systems evaluated were phytoremediation, hydraulic containment, soil vapor extraction and in-situ oxygen treatment.

The Air Force sent the proposal, detailed in the "Draft Final Zone 4 Corrective Measures Study," to the Texas Natural Resources Conservation Commission April 5, 2002.

The systems described in the Zone 4 corrective measures study will clean up the solvents, tetrachloroethene (PCE) and trichloroethene, (TCE) as well as their breakdown products, dichloroethene and vinyl chloride.

Tetrachloroethene and trichloroethene were used on base to degrease engine parts and entered the shallow groundwater as a result of spills and leaks. The shallow groundwater lies 15 to 40 feet beneath the surface and is not a source of drinking water in San Antonio. One thousand

feet of impermeable clay and rock separate the groundwater from the Edwards Aquifer.

The TNRCC must approve this cleanup proposal before it can be considered the final environmental cleanup remedy for this area. The Air Force expects to have all cleanup systems in place and operating by 2004.

The Air Force is holding a public comment period on this proposal. The comment period began June 15th and will end September 3rd.

The Zone 4 corrective measures study is available at the San Antonio Central Library in the government documents section.

### Questions?

AFBCA is dedicated to involving the community in the cleanup program for the former Kelly AFB. For more information on this project, please call the AFBCA Public Information Line at 210-925-0956.